EXHIBIT 65

Catalog   Cost Estimator   Help   Cookie Preferences   Log in   Sign up

Product guide

Kubernetes service

Search guide

⚲ Get started ⌃

Getting started with IBM Cloud Kubernetes Service

Understanding IBM Cloud Kubernetes Service

Your responsibilities with using IBM Cloud Kubernetes Service

Use cases ⌄

Learning paths ⌄

Release notes

▦ Tutorials ⌃

Tutorials library for Kubernetes Service ⤴

Setting up your first cluster in your Virtual Private Cloud (VPC)

▦ How to ⌃

Planning your cluster environment ⌄

Preparing your account ⌄

Installing the CLI ⌄

Setting up the API

Creating clusters ⌄

Accessing clusters ⌄

Adding worker nodes ⌄

Managing the cluster and worker node lifecycle ⌃

Checking your cluster version, operating system, and Kubernetes server version

Updating clusters, worker nodes, and cluster components

Creating and managing dedicated hosts on VPC Gen 2 infrastructure

Preparing for host maintenance updates

▤ View as PDF ⤴

←

🌐 English ⌄

Migrating to a new Ubuntu version

Last updated 2025-04-15

To migrate your worker nodes to a new Ubuntu version, run a command to specify the new version for a worker pool. Then, update the individual worker nodes in the pool.

> ⊘ **Deprecated:** Ubuntu 20 is deprecated and support ends on 31 May 2025. Migrate your worker nodes to Ubuntu 24 before support ends. Make sure you understand the limitations for Ubuntu 24 before you begin migration. For more information, see Migrating to a new Ubuntu version.

Default operating system by cluster version

Ubuntu 24 is the default operating system for all supported cluster versions. A worker pool's operating system does not automatically change when you upgrade a cluster.

Ubuntu 24 limitations

- For Ubuntu 24, the `/tmp` directory is a separate partition that has the `nosuid`, `noexec`, and `nodev` options set. If your apps install to and run scripts or binaries under the `/tmp` directory, they might fail. You can use the `/var/tmp` directory instead of the `/tmp` directory to run temporary scripts or binaries.
- The default `cgroup` implementation is `cgroup` v2. In Ubuntu 24, `cgroup` v1 is not supported. Review the Kubernetes migration documentation for cgroup v2 ⤴ and verify that your applications fully support `cgroup` v2. There are known issues with older versions of Java that might cause out of memory (OOM) issues for workloads.
- Note that with Ubuntu 24, NTP uses `timesyncd` and related commands might be updated.

Migration steps

Migrate your worker nodes to use Ubuntu 24. These steps apply to all supported cluster versions.

① Review your worker pool operating systems to determine which pools you need to migrate.

```
$ ibmcloud ks worker-pools -c CLUSTER
```

② Specify the new Ubuntu version for the worker pool.

```
$ ibmcloud ks worker-pool operating-system set --cluster CLUSTER --worker-pool POOL --operating-system UBUNTU_24_64
```

③ Update each worker node in the worker pool by running the `ibmcloud ks worker update` or `ibmcloud ks worker replace` command.

> ⓘ **Tip:** Make sure you have enough worker nodes to support your workload while you update or replace the relevant worker nodes. For more information, see Updating VPC worker nodes or Updating classic worker nodes.

Example command to update Classic worker nodes.

```
$ ibmcloud ks worker update --cluster CLUSTER --worker WORKER1_ID [--worker WORKER2_ID]
```

Example command to update VPC worker nodes.

On this page

Default operating system by cluster version

Ubuntu 24 limitations

Migration steps

Product guide

Kubernetes service

Search guide

Get started

Getting started with IBM Cloud Kubernetes Service

Understanding IBM Cloud Kubernetes Service

Your responsibilities with using IBM Cloud Kubernetes Service

Use cases

Learning paths

Release notes

Tutorials

Tutorials library for Kubernetes Service

Setting up your first cluster in your Virtual Private Cloud (VPC)

How to

Planning your cluster environment

Preparing your account

Installing the CLI

Setting up the API

Creating clusters

Accessing clusters

Adding worker nodes

Managing the cluster and worker node lifecycle

  Checking your cluster version, operating system, and Kubernetes server version

  Updating clusters, worker nodes, and cluster components

  Creating and managing dedicated hosts on VPC Gen 2 infrastructure

  Preparing for host maintenance updates

View as PDF

On this page

Default operating system by cluster version

Ubuntu 24 limitations

Migration steps

```
$ ibmcloud ks worker-pool operating-system set --cluster
CLUSTER --worker-pool POOL --operating-system UBUNTU_24_64
```

③ Update each worker node in the worker pool by running the `ibmcloud ks worker update` or `ibmcloud ks worker replace` command.

> ⓘ **Tip:** Make sure you have enough worker nodes to support your workload while you update or replace the relevant worker nodes. For more information, see Updating VPC worker nodes or Updating classic worker nodes.

Example command to update Classic worker nodes.

```
$ ibmcloud ks worker update --cluster CLUSTER --worker
WORKER1_ID [--worker WORKER2_ID]
```

Example command to update VPC worker nodes.

```
$ ibmcloud ks worker replace --cluster CLUSTER --worker
WORKER_ID --update
```

④ Get the details for your worker pool and workers. In the output, verify that your worker nodes run the new Ubuntu version.

Get the details for a worker pool.

```
$ ibmcloud ks worker-pools -c CLUSTER
```

Get the details for a worker node.

```
$ ibmcloud ks worker get --cluster CLUSTER --worker
WORKER_NODE_ID
```

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